

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for finding disconnection of a conductive wire formed on a vehicular plate glass, the method comprising the steps of:

(a) applying a voltage to the conductive wire; and

(b) imaging thermal radiation from a surface of the conductive wire by an infrared image sensor, while the step (a) is conducted, thereby producing a temperature distribution image for determining whether the disconnection of the conductive wire exists.

2. (original) A method according to claim 1, wherein the temperature distribution image is subjected to a binarization by an image processor.

3. (original) A method according to claim 1, wherein the temperature distribution image is compared with a data representing a pattern of the conductive wire.

4. (original) A method according to claim 3, wherein the data is a first image data obtained by drafting the pattern of the conductive wire.

5. (original) A method according to claim 3, wherein the data is a second image data obtained, prior to the step (a), by imaging thermal radiation from the surface of the conductive wire by the infrared image sensor.

6. (original) A method according to claim 3, wherein the comparison is conducted by superimposing the temperature distribution image on the data.

7. (original) A method according to claim 3, wherein the comparison is conducted by an image data subtraction between the temperature distribution image and the data.

8. (previously presented) An apparatus for finding disconnection of a conductive wire formed on a vehicular plate glass, the apparatus comprising:

a power source for applying a voltage to the conductive wire; and

an infrared image sensor for imaging thermal radiation from a surface of the conductive wire, thereby producing a temperature distribution image which indicates whether the disconnection in the conductive wire exists.

9. (original) An apparatus according to claim 8, wherein the infrared image sensor is an infrared camera.

10. (previously presented) A method according to claim 1, wherein the conductive wire serves as a heating wire for providing antifogging property or as an antenna wire.

11. (previously presented) An apparatus according to claim 8, wherein the conductive wire serves as a heating wire for providing antifogging property or as an antenna wire.

12. (previously presented) A method for finding disconnection of a plurality of conductive wires formed on a vehicular plate glass, the method comprising the steps of:

(a) applying a voltage to the conductive wires; and

(b) imaging thermal radiation from a surface of the conductive wires by an infrared image sensor, while the step (a) is conducted, thereby producing a temperature distribution image for determining whether the disconnection of the conductive wire exists.

13. (previously presented) A method according to claim 12, wherein the temperature distribution image is subjected to a binarization by an image processor.

14. (previously presented) A method according to claim 12, wherein the temperature distribution image is compared with a data representing a pattern of the conductive wires.

15. (previously presented) A method according to claim 14, wherein the data is a first image data obtained by drafting the pattern of the conductive wire.

16. (previously presented) A method according to claim 14, wherein the data is a second image data obtained, prior to the step (a), by imaging thermal radiation from the surface of the conductive wires by the infrared image sensor.

17. (previously presented) A method according to claim 14, wherein the comparison is conducted by superimposing the temperature distribution image on the data.

18. (previously presented) A method according to claim 14, wherein the comparison is conducted by an image data subtraction between the temperature distribution image and the data.

19. (previously presented) A method according to claim 12, wherein the conductive wires serve as heating wires for providing antifogging property or as antenna wires.

20. (previously presented) An apparatus for finding disconnection of conductive wires formed on a vehicular plate glass the apparatus comprising:

a power source for applying a voltage to the conductive wires; and

an infrared image sensor for imaging thermal radiation from a surface of the conductive wires, thereby producing a temperature distribution image which indicates whether the disconnection in the conductive wire exists.

21. (previously presented) An apparatus according to claim 20, wherein the infrared image sensor is an infrared camera.

22. (previously presented) An apparatus according to claim 20, wherein the conductive wires serve as heating wires for providing antifogging property or as antenna wires.

23. (currently amended) A method for finding disconnection of a plurality of conductive wires that are formed on a vehicular plate glass and are parallel with each other, the method comprising the steps of:

(a) applying a voltage to the conductive wires;

(b) imaging thermal radiation from a surface of the conductive wires by an infrared image sensor, while the step (a) is conducted, thereby producing a temperature distribution image;

(c) selecting ~~a rectangular~~ an inspection portion from the temperature distribution image, the ~~rectangular~~ inspection portion having a size to cover only a portion of each conductive wire;

(d) subjecting only the ~~rectangular~~ inspection portion of the temperature distribution image to a binarization by an image processor, thereby producing a binarized temperature distribution image of only the ~~rectangular~~ inspection portion; and

(e) comparing the binarized temperature distribution image with a data representing a pattern of the conductive wires to determine whether a disconnection exists anywhere in the entirety of the conductive wires, based on the binarized temperature distribution image of only the inspection portion.

24. (previously presented) A method according to claim 23, wherein the data of the step (e) is a first image data obtained by drafting the pattern of the conductive wire.

25. (previously presented) A method according to claim 23, wherein the data of the step (e) is a second image data obtained, prior to the step (a), by imaging

thermal radiation from the surface of the conductive wires by the infrared image sensor.

26. (previously presented) A method according to claim 23, wherein the comparison of the step (e) is conducted by superimposing the binarized temperature distribution image on the data.

27. (previously presented) A method according to claim 23, wherein the comparison of the step (e) is conducted by an image data subtraction between the binarized temperature distribution image and the data.

28. (previously presented) A method according to claim 23, wherein the conductive wires serve as heating wires for providing an antifogging property or as antenna wires.